

Remarks

Claims 18-26 and 28-31 are presented for reconsideration, with claims 18 and 31 being the independent claims. Claim 31 is sought to be amended (support for which is found at, e.g., paragraph 0016 of the originally filed specification). No new matter has been entered by any amendment.

Based on the above amendments and following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 103(a)

Claims 18, 19, 21-26 and 28-31 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over WO Patent No. WO 98/28644 to Schultz et al. ("Schultz") (using U.S. Patent No. 6,366,410 as a translated document) in view of U.S. Patent No. 5,134,522 to Ueda ("Ueda"). Claim 20 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Schultz in view of Ueda, in further view of U.S. Published Patent Application No. 2002/0036832 to Schultz et al. ("Schultz PPA"). Applicants respectively traverse these rejections.

Claims 18 and 31 recite features that distinguish over the applied references. For example, Claim 18 recites "a third lens group consisting of a single lens element made from a single material having a single index of refraction that receives the beam of radiation from the second lens group and controls field characteristics of the beam of radiation at a patterning device plane" and claim 31 recites "a third lens group consisting of a single lens made from one material having one index of refraction and having a spherical receiving surface and an aspherical transmitting surface," where both third lens groups are part of a relay lens group in an illumination system of a lithography system.

Shultz teaches at length of the inventors' non-trivial reduction of its field lens group 300 to a minimum of two lenses. Each of the two lenses is required to perform a particular respective operation in the processing of light (e.g., collection and diverging of

light). This is because Shultz is directed to a REMA found in an illumination system of a lithography system that processes light, such that the light has the proper optical characteristics to most optimally illuminate a reticle.

Ueda is directed to a projection lens system in a microfilm reader or reader printer that assists in reproducing microfilm images on a display. In Ueda, light is directed from a third lens group onto a rotating prism. The third lens group in Ueda is discussed as being used to correct field curvature and distortion. Ueda is non-analogous art. Ueda does not discuss, nor is it concerned with, a third lens group in an illumination system of a lithography system, as recited in claims 18 and 31, for example a third lens group that processes light to be directed onto a patterning device. The applied reference is only concerned with a projection lens system in a microfilm device, where the third lens group corrects curvature of field and distortion of a light beam projected onto a rotating prism. Thus, the applied reference constitutes non-analogous art with respect to the claimed invention pursuant to M.P.E.P. §2141.01(a), which requires an applied reference to either: (a) be in a field of the endeavor, which it is not; or (b) reasonably pertinent to the particular problem with which the inventor was concerned, which it is not.

There is no motivation to use the third lens group of a microfilm device in Ueda in the field lens portion of an illumination portion of a lithography system in Shultz absent the use of impermissible hindsight by the Examiner. The use of hindsight is not permitted under the prevailing patent laws. *Continental Can Company v. Monsanto Company*, 948 F.2d 1264, 1271, 20 USPQ2d 1746, 1751 (Fed. Cir. 1991) (“When prior art references require selective combination ... there must be some reason for the combination other than the hindsight gleaned from the invention itself.”); *Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc.*, 21 F.3d 1068, 1072 30 USPQ2d 1377,1380 (Fed. Cir. 1993) (“The motivation to combine references can not come from the invention itself.”); *Para-Ordnance Manufacturing, Inc. v. SGS Importers International, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995) (“Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor.”). It also appears the Examiner may have used the

impermissible “would have been able to produce” standard. See, e.g., *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565 (Fed. Cir. 1986) (stating the statute at Section 103 requires much more than the references would have been able to produce the claimed features, rather the statute requires it would have been obvious to produce the claimed invention without the benefit of hindsight).

Further, Applicants assert any use by the Examiner to apply piecemeal parts of Ueda’s third lens group to Schultz’s field lens portion would destroy the teaching in Schultz. This is because the use of the third lens group of Ueda would make the field lens portion of Shultz unsatisfactory for its intended purpose and/or change it’s principle of operation. See M.P.E.P § 2143.01(V) and (VI). For example, the two lens elements found in Shultz’s field lens portion perform specific respective optical processes on a light beam before the beam is directed onto a patterning device, which required respective optical processes could not be performed by the single lens element of Ueda.

Thus, for at least these reasons, the Examiner has failed to establish a prima facie case of obviousness.

Shultz PPA does nothing to cure the deficiencies of Shultz or Ueda.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 18 and 31. Also, at least based on their dependency from claim 18, claims 17-26 and 28-30 should be found allowable over the applied references.

Conclusion

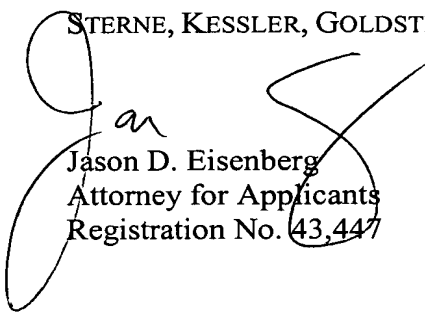
All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite

prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.


Jason D. Eisenberg
Attorney for Applicants
Registration No. 43,447

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600
553200.1